Statement of

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Introduction

At an alarming and increasing rate, America's emergency departments are overcrowded and understaffed to meet the needs of patients. An ambulance is diverted away from a hospital every minute in our country. Patients admitted to the hospital lie in hallways for days waiting for transfer to inpatient beds. America's ability to "surge" in a crisis is greatly diminished or eliminated altogether. This is affecting the nation's ability to respond to acts of terrorism and save lives during disasters, such as Hurricane Katrina.

Mr. Chairman and members of the subcommittee, my name is Dr. Rick Blum, and I would like to thank you for allowing me to testify on behalf of the American College of Emergency Physicians, the largest specialty organization in emergency medicine, with nearly 24,000 members committed to advancing emergency care.

The testimony I give is not only from the experiences of emergency physicians, but from the findings of the Institute of Medicine reports, released in June, and of a National Report Card on the State of Emergency Medicine, released in January.

ACEP has been working to raise awareness among lawmakers and the public of the critical conditions facing emergency patients today and how this is affecting the ability of emergency physicians and nurses to "surge" in a crisis. These efforts include promoting the findings of a 2003 GAO report on crowding; conducting a stakeholder summit last year; and commencing a rally on the west lawn of the U.S. Capitol attended by nearly 4,000 emergency physicians to promote H.R. 3875/S. 2750, the "Access to Emergency Medical Services Act"

And we know from our experience with Hurricane Katrina that more people would have lived had surrounding hospitals had more surge capacity.

ACEP is the largest specialty organization in emergency medicine, with nearly 24,000 members who are committed to improving the quality of emergency care through continuing education, research, and public education. ACEP has 53 chapters representing each state, as well as Puerto Rico and the District of Columbia, and a Government Services Chapter representing emergency physicians employed by military branches and other government agencies.

At an alarming and increasing rate, emergency departments are overcrowded, surge capacity is diminished or being eliminated altogether, ambulances are diverted to other hospitals, patients admitted to the hospital are waiting longer for transfer to inpatient beds, and the shortage of medical specialists is worsening. These are the findings of the Institute of Medicine (IOM) report "Hospital-Based Emergency Care: At the Breaking Point," which was just released on June 14. I would like to say these findings are new to emergency physicians, but they are not.

ACEP for years now has been working to raise awareness of the critical condition that exists in delivering high-quality emergency medical care with lawmakers and the public.

More recently, these efforts included promoting the findings of a 2003 Government Accountability Office (GAO) report on emergency department crowding; conducting a stakeholder summit in July 2005 to discuss ways in which overcrowding in America's emergency departments could be alleviated; commencing a rally on the west lawn of the U.S. Capitol in September 2005 attended by nearly 4,000 emergency physicians to promote the introduction of H.R. 3875/S. 2750, the "Access to Emergency Medical Services Act;" and releasing our first "National Report Card on the State of Emergency Medicine" in January 2006.

ACEP National Report Card on the State of Emergency Medicine

ACEP's "National Report Card on the State of Emergency Medicine" is an assessment of the support each state provides for its emergency medicine systems. Grades were determined using 50 objective and quantifiable criteria to measure the performance of each state and the District of Columbia. Each state was given an overall grade plus grades in four categories, *Access to Emergency Care, Quality and Patient Safety, Public Health and Injury Prevention, and Medical Liability Reform.*

In addition to the state grades, the report card also assigned a grade to the emergency medicine system of the United Sates as whole. Eighty-percent of the country earned mediocre or near-failing grades, and America earned a C-, barely above a D.

Overall, the report card underscores findings of earlier examinations of our nation's safety net – that it is in desperate need of change if we are to continue our mission of providing quality emergency medical care when and where it is expected.

Emergency Department Overcrowding and Lack of Surge Capacity

As the frontline of emergency care in this country, emergency physicians are particularly aware of how the lack of surge capacity in our nation's emergency departments is affecting patients. Here are two true patient stories that have been anonymously shared with ACEP that illustrate this point:

I know of a little girl with abdominal pain who came to a crowded emergency department in Texas. The waiting room was crowded with people, and there was literally no room for her to lie down. So she went home, and her appendix burst. The ambulance raced her back to the hospital where she was treated right away. She nearly died, and it took three months for her to recover. Three months of needless fear, pain, suffering and costs that would have been avoided – and could have been avoided.

I know of a 50-year-old Ohio man with chest pain who came to an overcrowded emergency department. The initial EKG showed no signs of heart attack, so he had to wait in the waiting room due, because no beds were available. His pain worsened and he arrested in the waiting room and died while waiting for a bed

The root of this problem exists due to lack of capacity in our nation's emergency departments. To be clear, I am not discussing crowded emergency department waiting rooms, but the actual treatment areas of emergency departments.

Overcrowded emergency departments threaten access to emergency care for everyone – insured and uninsured alike – and create a situation where the emergency department can no longer safely treat any additional patients. This problem is particularly acute after a mass-casualty event, such as a man-made or natural disaster.

Every day in emergency departments across America, critically ill patients line the halls, waiting hours – sometimes days – to be transferred to inpatient beds. This causes gridlock, which means other patients often wait hours to see physicians, and some leave without being seen or against medical advice.

Contributing factors to overcrowding include a lack of hospital inpatient beds; a growing elderly population and nationwide shortages of nurses, physicians and hospital support staff. As indicated by the IOM report, another factor that directly impacts emergency department patient care and overcrowding is the shortage of on-call specialists due to: fewer practicing emergency and trauma specialists; lack of compensation for providing theses services to high percentage of uninsured and underinsured patients; substantial demands on quality of life; increased risk of being sued and high insurance premiums; and relaxed Emergency Medical Treatment and Labor Act (EMTALA) requirements for on-call panels.

ACEP and Johns Hopkins University conducted two national surveys, one in the spring of 2004 and another in the summer of 2005, to determine how current regulations and the practice climate are affecting the availability of medical specialists to care for patients in the nation's emergency departments. The key findings of these reports include:

- Access to medical specialists deteriorated significantly in one year. Nearly three-quarters (73 percent) of emergency department medical directors reported inadequate on-call specialist coverage, compared with two-thirds (67 percent) in 2004.
- Fifty-one percent reported deficiencies in coverage occurred because specialists left their hospitals to practice elsewhere.
- The top five specialty shortages cited in 2005 were orthopedics; plastic surgery; neurosurgery; ear, nose and throat; and hand surgery. Many who remain have negotiated with their hospitals for fewer on-call coverage hours (42 percent in 2005, compared with 18 percent in 2004).

Two anonymous stories dramatize the complex challenges of the on-call problem:

> I know of a 23 year-old male who arrived unconscious at a small hospital in Texas. It turned out he had a subdural hematoma. The hospital had no neurosurgical services. Ten minutes away was a hospital with plenty of neurosurgeons, but the hospital would not accept the patient because the

on-call neurosurgeon said he needed him to be at a trauma center with an around-the-clock ability to monitor the patient. All the trauma centers or hospitals larger were on "divert." The patient FINALLY was accepted by a hospital many miles away, with a 90-minute Life flight helicopter transfer. The patient died immediately after surgery.

I know of a 65 year-old male in Washington State who came to an emergency department complaining of abdominal pain. The ultrasound showed a six-centimeter abdominal aortic aneurysm and he was unstable for CT scanning. The hospital had no vascular surgeon available within 150 miles; a general surgeon was available, but he refused to take the patient out-of-state. The emergency team reversed the Coumadin and transferred the patient three hours away to the nearest Level I trauma center, but he died on the operating table. I understand he probably would have lived had there not been a three-hour delay.

In addition, reductions in reimbursement from Medicare, Medicaid and other payers, as well as payment denials, continue to reduce hospital resource capacities. To compensate, hospitals have been forced to operate with far fewer inpatient beds than they did a decade ago. Between 1993 and 2003, the number of inpatient beds declined by 198,000 (17 percent). This means fewer beds are available for admissions from the emergency department, and the health care system no longer has the surge capacity to deal with sudden increases in patients needing care.

The overall result is that fewer inpatient beds are available to emergency patients who are admitted to the hospital. Many admitted patients are "boarded," or left in the emergency department waiting for an inpatient bed, in non-clinical spaces – including offices, storerooms, conference rooms – even halls – when emergency departments are overcrowded.

The majority of America's 4,000 hospital emergency departments are operating "at" or "over" critical capacity. Between 1992 and 2003, emergency department visits rose by more than 26 percent, from 90 million to 114 million, representing an average increase of more than 2 million visits per year. At the same time, the number of hospitals with emergency departments declined by 425 (9 percent), leaving fewer emergency departments left to treat an increasing volume of patients, who have more serious and complex illnesses, which has contributed to increased ambulance diversion and longer wait times at facilities that remain operational.

According to the 2003 report from the Government Accountability Office (GAO), overcrowding has multiple effects, including prolonged pain and suffering for patients, long emergency department waits and increased transport times for ambulance patients. This report found 90 percent of hospitals in 2001 boarded patients at least two hours and nearly 20 percent of hospitals reported an average boarding time of eight hours.

There are other factors that contribute to overcrowding, as noted by the GAO report, including:

- Beds that could be used for emergency department admissions are instead being reserved for scheduled admissions, such as surgical patients who are generally more profitable for hospitals.
- Less than one-third of hospitals that went on ambulance diversion in fiscal year 2001 reported that they had not cancelled any elective procedures to minimize diversion.
- Some hospitals cited the costs and difficulty of recruiting nurses as a major barrier to staffing available inpatient/ICU beds.

To put this in perspective, I would like to share with you the findings of the IOM report on hospital-based emergency care, which was just released on June 14:

> "Emergency department overcrowding is a nationwide phenomenon, affecting rural and urban areas alike (Richardson et al., 2002). In one study, 91 percent of EDs responding to a national survey reported overcrowding as a problem; almost 40 percent reported that overcrowding occurred daily (Derlet et al., 2001). Another study, using data from the National Emergency Department Overcrowding Survey (NEDOCS), found that academic medical center EDs were crowded on average 35 percent of the time. This study developed a common set of criteria to identify crowding across hospitals that was based on a handful of common elements: all ED beds full, people in hallways, diversion at some time, waiting room full, doctors rushed, and waits to be treated greater than 1 hour (Weiss et al., 2004; Bradley, 2005)."

As previously mentioned in my statement, ACEP has been working with emergency physicians, hospitals and other stakeholders around the country to examine ways in which overcrowding might be mitigated. Of note, ACEP conducted a roundtable discussion in July 2005 to promote understanding of the causes and implications of emergency department overcrowding and boarding, as well as define solutions. I have included an addendum to my testimony of strategies, while not exhaustive or comprehensive, which still hold promise in addressing the emergency department overcrowding problem.

Ambulance Diversion

Another potentially serious outcome from overcrowded conditions in the emergency department is ambulance diversion. It is important to note that ambulances are only diverted to other hospitals when crowding is so severe that patient safety could be jeopardized.

The GAO reported two-thirds of emergency departments diverted ambulances to other hospitals during 2001, with crowding most severe in large population centers where

nearly one in 10 hospitals reported being on diversion 20 percent of the time (more than four hours per day).

A study released in February by the National Center for Health Statistics found that, on average, an ambulance in the United States is diverted from a hospital every minute because of emergency department overcrowding or bed shortages. This national study, based on 2003 data, reported air and ground ambulances brought in about 14 percent of all emergency department patients, with about 16.2 million patients arrived by ambulance, and that 70 percent of those patients had urgent conditions that required care within an hour. A companion study found ambulance diversions in Los Angeles more than tripled between 1998 and 2004.

According to the American Hospital Association (AHA), nearly half of all hospitals (46 percent) reported time on diversion in 2004, with 68 percent of teaching hospitals and 69 percent of urban hospitals reporting time on diversion.

As you can see from the data provided, this nation's emergency departments are having difficulty meeting the day-to-day demands placed on them. Overcrowded emergency departments lead to diminished patient care and ambulance diversion. Once the emergency departments have filled all of their beds, there is no reasonable way to expect that these stressed systems will be able to suddenly create the surge capacity necessary to effectively manage a pandemic, natural disaster, terrorist attack or other mass-casualty event.

ACEP Recommendations

We must take steps now to avoid a catastrophic failure of our medical infrastructure and we must take steps now to create capacity, alleviate overcrowding and improve surge capacity in our nation's emergency departments.

As my colleague, ACEP Board member David Seaberg, M.D., C.P.E., F.A.C.E.P., noted in his testimony before a joint hearing conducted by this subcommittee and the Prevention of Nuclear and Biological Attack Subcommittee on February 8, ACEP has developed a 10-point plan to achieve these goals and we continue to urge Congress to enact these measures in order to effectively manage a pandemic, natural disaster, terrorist attack or other mass-casualty event. We have noted where ACEP's recommendations are complimented by several key IOM report proposals, which I have included as an addendum to my testimony.

1. We must increase the surge capacity of our nation's emergency departments by ending the practice of "boarding" admitted patients in emergency departments because no inpatient beds are available. As mentioned previously in my testimony, this will require changing the way hospitals are funded to allow for inpatient and intensive care unit surge capacity to manage this burden. **This proposal is specifically addressed in the IOM report recommendations (# 4.4 and # 4.5).**

2. We must implement protocols to collect and monitor real-time data for syndromic surveillance, hospital inpatient and emergency department capacities and ambulance diversion status. Collection of this data is vital to developing appropriate protocols.
3. Homeland Security agencies on the Federal, State, and Local levels need to understand that hospitals and Emergency Departments are part of the community's Critical Infrastructure. We can not have response and recovery in a disaster without fully functioning, protected, and connected health resources. **This proposal is specifically addressed in the IOM report recommendation (# 6.1).**
4. We must require hospitals and communities that are severely affected by a natural or man-made disaster, or even a severe influenza outbreak, to postpone elective admissions until the crisis has abated. We must develop a way to compensate those facilities for their loss of revenue.
5. Command and control of disaster medical response must be more coordinated across federal, state and local agencies and departments.
6. We must establish a committee of stakeholders and disaster medicine experts from the public- and private-sectors and academic institutions to develop and/or refine national medical preparedness priorities and standards. We must change the national preparedness culture to one which is consensus-driven and evidence-based.
7. We must provide federal and state funding to compensate hospitals and emergency departments for the unreimbursed cost of meeting their critical public health and safety-net roles to ensure these emergency departments remain open and available to provide care in their communities. **This proposal is specifically addressed in the IOM report recommendation (# 2.1).**
8. We must establish a sustainable funding mechanism for disaster preparedness for hospitals, emergency departments and emergency management that is tied to national benchmarks and deliverables.
9. To ensure emergency physicians and nurses play a primary role in disaster planning and are considered in any national allocation of resources and protective measures, Congress should continue to include them in any definitions regarding first responders to disasters, acts of terrorism and epidemics.
10. Congress should pass H.R. 3875/S. 2750, the "Access to Emergency Medical Services Act," which provides incentives to hospitals to reduce overcrowding and provides reimbursement and liability protection for EMTALA-related care.

Conclusion

Emergency departments are a health care safety net for everyone – the uninsured and the insured. Unlike any other health care provider, the emergency department is open for all patients who seek care, 24 hours a day, 7 days a week, 365 days a year. We provide care to anyone who comes through our doors, regardless of their ability to pay. At the same time, when factors force an emergency department to close, it is closed to everyone and the community is denied a vital resource.

America's emergency departments are already operating at or over capacity. If no changes are made to alleviate emergency department overcrowding, the nation's health

care safety, the quality of patient care and the ability of emergency department personnel to respond to a public health disaster will be in severe peril.

While adopting crisis measures to increase emergency department capacity may provide a short-term solution to a surge of patients, ultimately we need long-term answers. The federal government must take the steps necessary to strengthen our resources and prevent more emergency departments from being permanently closed. In the last ten years, the number and age of Americans has increased significantly. During that same time, while visits to the emergency department have risen by tens of millions, the number of emergency departments and staffed inpatient hospital beds in the nation has decreased substantially. This trend is simply not prudent public policy, nor is it in the best interest of the American public.

Let me close by assuring you that in any local, regional or national disaster or epidemic, the nation's emergency physicians and emergency nurses will be there to do their jobs, as was evident during the Hurricanes Katrina and Rita, as well as the terrorist attacks on September 11. ACEP urges this committee and the U.S. Congress to consider the 10-point plan that I have presented here today and specifically advocate the enactment of H.R. 3875/S. 2750, the "Access to Emergency Medical Services Act."

Every day we save lives across America. Please give us the capacity and the tools we need to be there for you when and where you need us... today, tomorrow and when the next major disaster strikes the citizens of this great country.

Attachments

Overcrowding strategies outlined at the roundtable discussion "Meeting the Challenges of Emergency Department Overcrowding/Boarding," conducted by the American College of Emergency Physicians (ACEP) in July 2005

Strategies currently being employed to mitigate emergency department overcrowding:

- Expand emergency department treatment space. According to a Joint Commission on Accreditation of Healthcare Organizations (JCAHO) standard (LD.3.11), hospital leadership should identify all of the processes critical to patient flow through the hospital system from the time the patient arrives, through admitting, patient assessment and treatment and discharge.
- Develop protocols to operate at full capacity. In short, when emergency patients have been admitted, they are transferred to other units within the hospital. This means that the pressure to find space for admitted patients is shared by other parts of the hospital.
- Address variability in patient flow. This involves assessing and analyzing patient arrivals and treatment relative to resources to determine how to enhance the movement of patients through the emergency department treatment process and on to the appropriate inpatient floors.
- Use queuing as an effective tool to manage provider staffing. According to an in article in the Journal of the Society for Academic Emergency Medicine, surveyors found that timely access to a provider is a critical measure to quality performance. In an environment where emergency department's are often understaffed, analyses of arrival patterns and the use of queuing models can be extremely useful in identifying the most effective allocation of staff.
- Maximize emergency department efficiency to reduce the burden of overcrowding and expanding their capacity to handle a sudden increase or surge in patients.
- Manage acute illness or injury and the utilization of emergency services in anticipatory guidance. In its policy statement on emergency department overcrowding issued in September 2004, the American Academy of Pediatrics noted: "The best time to educate families about the appropriate use of an emergency department, calling 911, or calling the regional poison control center is before the emergency occurs. Although parents will continue to view and respond to acute medical problems as laypersons, they may make better-informed decisions if they are prepared."
- Place beds in all inpatient hallways during national emergencies, which has been effectively demonstrated in Israel.
- Improve accountability for a lack of beds with direct reports to senior hospital staff, as done in Sturdy Memorial Hospital.
- Set-up discharge holding units for patients who are to be discharged in order not to tie-up beds that could be used by others. The 2003 GAO report found that hospitals

rely on a number of methods used to minimize going on diversion, including using overflow or holding areas for patients.

- Establish internal staff rescue teams. This concept involves intense collaboration between emergency department staff and other services in the hospital when patient volume is particularly high.
- Improve coordination of scheduling elective surgeries so they are more evenly distributed throughout the week. For example, Boston Medical Center had two cardiac surgeons who both scheduled multiple surgeries on Wednesdays. The Medical Center improved the cardiac surgery schedule by changing block time distribution so one surgeon operated on Wednesdays and the other operated on Fridays.
- Employ emergency department Observation Units to mitigate crowding.
- Strive to minimize delays in transferring patients.
- Support new Pay-for-Performance measures, such as reimbursing hospitals for admitting patients and seeing them more quickly and for disclosing measurements and data.
- Monitor hospital conditions daily, as done by some EMS community disaster departments.
- Institute definitions of crowding, saturation, boarding by region with staged response by EMS, public health and hospitals. For example, the Massachusetts Chapter of ACEP has been working with its Department of Public Health (DPH) on this issue for several years, which has resulted in the development of a "best practices" document for ambulance diversion and numerous related recommendations including protocols regarding care of admitted patients awaiting bed placement. The chapter's efforts also resulted in the commissioner of DPH sending a letter to all hospitals outlining boarding protocols.
- Seek best practices from other countries that have eased emergency department crowding.
- Improve internal information sharing through technology.

Strategies and innovative suggestions to solve the crowding crisis that are in the planning or testing phases:

- Physicians should work to improve physician leadership in hospital decision-making.
- Hospitals should expand areas of care for admitted patients. In-hospital hallways would be preferable to emergency department hallways. If 20 patients are waiting for admission and there are 20 hallways available, putting one patient per hallway would be preferable to putting all 20 in the emergency department, which only prevents others from accessing care.
- Design procedures to facilitate quicker inpatient bed turnover, with earlier discharges and improved communications between the housekeeping and admission departments.
- Offer staggered start times and creative shifts that would offer incentives to those who couldn't work full-time or for those who would benefit from having a unique work schedule.
- Collect data to measure how patients move through the hospital.

- Address access to primary care and issues to facilitate patient care that supply lists of clinics and other community-based sources of care.
- Communities should increase the number of health care facilities and improve access to quality care for the mentally ill.
- Policymakers should improve the legal climate so that doctors aren't forced to order defensive tests in hopes of fending off lawsuits.
- Ensure emergency medical care is available to all regardless of ability to pay or insurance coverage and should therefore be treated as an essential community service that is adequately funded.
- Lawmakers should enact universal health insurance that includes benefits for primary care services.

Appendix E
Recommendations and Responsible Entities from the *Future of Emergency Care* Series

HOSPITAL-BASED EMERGENCY CARE: AT THE BREAKING POINT

	Congress	DHHS	DOT	DHS	DOD	States	Hospitals	EMS Agencies	Private Industry	Professional Organizations	Other
Chapter 2: The Evolving Role of Hospital-Based Emergency Care											
2.1 Congress should establish dedicated funding, separate from DSH payments, to reimburse hospitals that provide significant amounts of uncompensated emergency and trauma care for the financial losses incurred by providing those services. • Congress should initially appropriate $50 million for the purpose, to be administered by the Centers for Medicare and Medicaid Services. • CMS should establish a working group to determine the allocation of these funds, which should be targeted to providers and localities at greatest risk; the working group should then determine funding needs for subsequent years	X	X									
Chapter 3: Building a 21st-Century Emergency Care System											
3.1 The Department of Health and Human Services and the National Highway Traffic Safety Administration, in partnership with professional organizations, should convene a panel of individuals with		X	X							X	

	Congress	DHHS	DOT	DHS	DOD	States	Hospitals	EMS Agencies	Private Industry	Professional Organizations	Other
multidisciplinary expertise to develop an evidence-based categorization system for EMS, EDs, and trauma centers based on adult and pediatric service capabilities.											
3.2 The National Highway Traffic Safety Administration, in partnership with professional organizations, should convene a panel of individuals with multidisciplinary expertise to develop evidence-based model prehospital care protocols for the treatment, triage, and transport of patients.			X							X	
3.3 The Department of Health and Human Services should convene a panel of individuals with emergency and trauma care expertise to develop evidence-based indicators of emergency care system performance.		X									
3.4 The Department of Health and Human Services should adopt regulatory changes to the Emergency Medical Treatment and Active Labor Act (EMTALA) and the Health Insurance Portability and Accountability Act (HIPAA) so that the original goals of the laws are preserved but integrated systems may further develop.		X									
3.5 Congress should establish a demonstration program, administered by the Health Resources and Services Administration, to promote regionalized, coordinated, and accountable emergency care systems throughout the country, and appropriate $88 million over 5 years to this program.	X	X									
3.6 Congress should establish a lead agency for emergency and trauma care within 2 years of the publication of this report. The lead agency should be housed in the Department of Health and Human Services, and should have primary programmatic responsibility for the full continuum of EMS, emergency and trauma care for adults and children, including medical 9-1-1 and emergency medical dispatch, prehospital EMS (both ground and air), hospital-based emergency and	X	X									

	Congress	DHHS	DOT	DHS	DOD	States	Hospitals	EMS Agencies	Private Industry	Professional Organizations	Other
trauma care, and medical-related disaster preparedness. Congress should establish a working group to make recommendations regarding the structure, funding, and responsibilities of the new agency, and develop and monitor the transition. The working group should have representation from federal and state agencies and professional disciplines involved in emergency and trauma care.											
Chapter 4: Improving the Efficiency of Hospital-Based Emergency Care											
4.1 Hospital chief executive officers should adopt enterprise-wide operations management and related strategies to improve the quality and efficiency of emergency care.							X				
4.2 The Centers for Medicare and Medicaid Services should remove the current restrictions on the medical conditions that are eligible for separate clinical decision unit (CDU) payment.		X									
4.3 Training in operations management and related approaches should be promoted by professional associations; accrediting organizations, such as the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) and the National Committee for Quality Assurance (NCQA); and educational institutions that provide training in clinical, health care management, and public health disciplines.										X	X
4.4 The Joint Commission on the Accreditation of Healthcare Organizations (JCAHO) should reinstate strong standards that sharply reduce and ultimately eliminate ED crowding, boarding, and diversion.											X
4.5 Hospitals should end the practices of boarding patients in the ED and ambulance diversion, except in the most extreme cases, such as a community mass casualty event. The Centers for Medicare and Medicaid Services should convene a working group that includes experts in emergency care, inpatient critical care, hospital operations management, nursing and other relevant disciplines to develop		X					X				

	Congress	DHHS	DOT	DHS	DOD	States	Hospitals	EMS Agencies	Private Industry	Professional Organizations	Other
boarding and diversion standards, as well as guidelines, measures, and incentives for implementation, monitoring, and enforcement of these standards.											
Chapter 5: Technology and Communication											
5.1 Hospitals should adopt robust information and communications systems to improve the safety and quality of emergency care and enhance hospital efficiency.							X				
Chapter 6: The Emergency Care Workforce											
6.1 Hospitals, physician organizations, and public health agencies should collaborate to regionalize critical specialty care on-call services.							X			X	X
6.2 Congress should appoint a commission to examine the factors responsible for the declining availability of providers in high-risk emergency and trauma care specialties, including the role played by medical malpractice liability in specific, and to recommend targeted state and federal actions to mitigate the adverse impact of the responsible factors and ensure quality of care.	X										
6.3 The American Board of Medical Specialties and its constituent Boards should extend eligibility for certification in critical care medicine to all acute care and primary care physicians who complete an accredited critical care fellowship program.										X	X
6.4 The Department of Health and Human Services, the Department of Transportation, and the Department of Homeland Security should jointly undertake a detailed assessment of emergency and trauma workforce capacity, trends, and future needs, and develop strategies to meet these needs in the future.		X	X	X							
6.5 The Department of Health and Human Services, in partnership with professional organizations, should develop national standards for core competencies applicable to physicians, nurses, and other key		X								X	

	Congress	DHHS	DOT	DHS	DOD	States	Hospitals	EMS Agencies	Private Industry	Professional Organizations	Other
emergency and trauma professionals, using a national, evidence-based, multidisciplinary process.											
6.6 States should link rural hospitals with academic health centers to enhance opportunities for professional consultation, telemedicine, patient referral and transport, and continuing professional education.						X	X				
Chapter 7: Disaster Preparedness											
7.1 The Department of Homeland Security, the Department of Health and Human Services, the Department of Transportation, and the states should collaborate with the Veterans Health Administration to integrate the VHA into civilian disaster planning and management.		X	X								X
7.2 All institutions responsible for the training, continuing education, and credentialing and certification of professionals involved in emergency care (including medicine, nursing, EMS, allied health, public health, and hospital administration) incorporate disaster preparedness training into their curricula and competency criteria.						X				X	X
7.3 Congress should significantly increase total disaster preparedness funding in FY 2007 for hospital emergency preparedness in the following areas: • strengthening and sustaining trauma care systems; • enhancing ED, trauma center, and inpatient surge capacity; • improving EMS response to explosives • designing evidence-based training programs; • enhancing the availability of decontamination showers, standby ICU capacity; negative pressure rooms, and appropriate personal protective equipment; • conducting international collaborative research on the civilian consequences of conventional weapons (CW) terrorism.	X										
Chapter 8: Enhancing the Emergency and Trauma Care Research Base											
8.1 Academic medical centers should support emergency and trauma							X				

	Congress	DHHS	DOT	DHS	DOD	States	Hospitals	EMS Agencies	Private Industry	Professional Organizations	Other
care research by providing research time and adequate facilities for promising emergency care and trauma investigators, and by strongly considering the establishment of autonomous departments of emergency medicine.											
8.2 The Secretary of the Department of Health and Human Services should conduct a study to examine the gaps and opportunities in emergency and trauma care research, and recommend a strategy for the optimal organization and funding of the research effort. This study should include consideration of: training of new investigators; development of multi-center research networks; funding of General Clinical Research Centers (GCRCs) that specifically include an emergency and trauma care component; involvement of emergency and trauma care researchers in the grant review and research advisory processes; and improved research coordination through a dedicated center or institute. Congress and federal agencies involved in emergency care research (including DOT, DHHS, DHS, and DoD) should implement the study's recommendations.	X	X	X	X	X						
8.3 Congress should modify Federalwide Assurance Program (FWA) regulations to allow the acquisition of limited, linked, patient outcome data without the existence of an FWA.	X										

EMERGENCY MEDICAL SERVICES AT THE CROSSROADS

	Congress	DHHS	DOT	DHS	DOD	States	Hospitals	EMS Agencies	Private Industry	Professional Organizations	Other
Chapter 3: Building a 21st-Century Emergency Care System											
3.1 The Department of Health and Human Services and National Highway Traffic Safety Administration, in partnership with professional organizations, should convene a panel of individuals with multidisciplinary expertise to develop an evidence-based categorization system for EMS, EDs, and trauma centers based on adult and pediatric service capabilities.		X	X							X	
3.2 The National Highway Traffic Safety Administration, in partnership with professional organizations, should convene a panel of individuals with multidisciplinary expertise to develop evidence-based, model prehospital care protocols for the treatment, triage, and transport of patients.			X							X	
3.3 The Department of Health and Human Services should convene a panel of individuals with emergency and trauma care expertise to develop evidence-based indicators of emergency care system performance.		X									
3.4 Congress should establish a demonstration program, administered by Health Resources and Services Administration, to promote regionalized, coordinated, and accountable emergency care systems throughout the country, and appropriate $88 million over 5 years to this program.	X	X									
3.5 Congress should establish a lead agency for emergency and trauma care within 2 years of the publication of this report. This lead agency should be housed in the Department of Health and Human Services, and should have primary programmatic responsibility for the full continuum of EMS, emergency and trauma care for adults and children, including medical 9-1-1 and emergency medical dispatch, prehospital EMS (both	X	X									

	Congress	DHHS	DOT	DHS	DOD	States	Hospitals	EMS Agencies	Private Industry	Professional Organizations	Other
ground and air), hospital-based emergency and trauma care, and medical-related disaster preparedness. Congress should establish a working group to make recommendations regarding the structure, funding, and responsibilities of the new agency, and develop and monitor the transition. The working group should have representation from federal and state agencies and professional disciplines involved in emergency and trauma care.											
3.6 The Department of Health and Human Services should adopt rule changes to the Emergency Medical Treatment and Active Labor Act (EMTALA) and the Health Insurance Portability and Accountability Act (HIPAA) so that the original goals of the laws are preserved but integrated systems may further develop.		X									
3.7 CMS should convene an ad hoc work group with expertise in emergency care, trauma, and EMS systems to evaluate the reimbursement of EMS and make recommendations regarding inclusion of readiness costs and permitting payment without transport.		X									
Chapter 4: Supporting a High Quality EMS Workforce											
4.1 State governments should adopt a common scope of practice for EMS personnel, with state licensing reciprocity.						X					
4.2 States should require national accreditation of paramedic education programs.						X					
4.3 States should accept national certification as a prerequisite for state licensure and local credentialing of EMS providers.						X					
4.4 The American Board of Emergency Medicine should create a subspecialty certification in EMS.										X	
Chapter 5: Advancing System Infrastructure											
5.1 States should assume regulatory oversight of the medical aspects of air medical services, including communications, dispatch, and transport protocols.						X					

	Congress	DHHS	DOT	DHS	DOD	States	Hospitals	EMS Agencies	Private Industry	Professional Organizations	Other
5.2 Hospitals, trauma centers, EMS agencies, public safety departments, emergency management offices, and public health agencies should develop integrated and interoperable communications and data systems.							X	X			X
5.3 The Department of Health and Human Services should fully involve prehospital EMS leadership in discussions about the design, deployment, and financing of the National Health Information Infrastructure (NHII).		X									
Chapter 6: Preparing for Disasters											
6.1 The Department of Health and Human Services, the Department of Transportation, the Department of Homeland Security, and the states should elevate emergency and trauma care to a position of parity with other public safety entities in disaster planning and operations.		X	X	X		X					
6.2 Congress should substantially increase funding for EMS-related disaster preparedness through dedicated funding streams.	X										
6.3 Professional training, continuing education, and credentialing and certification programs of all the relevant EMS professional categories, should incorporate disaster preparedness training into their curricula, and require the maintenance of competency in these skills.			X			X				X	X
Chapter 7: Optimizing Prehospital Care through Research											
7.1 Federal agencies that fund emergency and trauma care research should target additional funding at prehospital EMS research, with an emphasis on systems and outcomes research.		X	X	X	X						X
7.2 Congress should modify Federalwide Assurance Program (FWA) regulations to allow the acquisition of limited, linked, patient outcome data without the existence of an FWA.	X										
7.3 The Secretary of Department of Health and Human Services should conduct a study to examine the gaps and opportunities in emergency and trauma care research, and recommend a strategy for the optimal organization and funding of the research effort. This study should	X	X	X	X	X						

	Congress	DHHS	DOT	DHS	DOD	States	Hospitals	EMS Agencies	Private Industry	Professional Organizations	Other
include consideration of: training of new investigators; development of multi-center research networks, involvement of emergency medical services researchers in the grant review and research advisory processes; and improved research coordination through a dedicated center or institute. Congress and federal agencies involved in emergency care research (including Department of Transportation, Department of Health and Human Services, Department of Homeland Security, and Department of Defense) should implement the study's recommendations.											

EMERGENCY CARE FOR CHILDREN: GROWING PAINS

	Congress	DHHS	DOT	DHS	DOD	Hospitals	EMS Agencies	Private Industry	Professional Societies	Other
Chapter 3: Building a 21st-Century Emergency Care System										
3.1 The Department of Health and Human Services and National Highway Traffic Safety Administration, in partnership with professional organizations, should convene a panel of individuals with multidisciplinary expertise to develop an evidence-based categorization system for EMS, EDs, and trauma centers based on adult and pediatric service capabilities.		X	X						X	
3.2 The National Highway Traffic Safety Administration, in partnership with professional organizations, should convene a panel of individuals with multidisciplinary expertise to develop evidence-based model prehospital care protocols for the treatment, triage, and transport of patients, including children			X						X	
3.3 The Department of Health and Human Services should convene a panel of individuals with emergency and trauma care expertise to develop evidence-based indicators of emergency care system performance, including performance of pediatric emergency care.		X								
3.4 Congress should establish a demonstration program, administered by the Health Resources and Services Administration, to promote regionalized, coordinated, and accountable emergency care systems throughout the country, and appropriate $88 million over 5 years to this program.	X	X								
3.5 The Department of Health and Human Services should adopt rule changes to the Emergency Medical Treatment and Active Labor Act and the Health Insurance Portability and Accountability Act so that the original goals of the laws are preserved but integrated systems may further develop.		X								
3.6 Congress should establish a lead agency for emergency and trauma care within 2 years of the publication of this report. The lead agency	X	X								

	Congress	DHHS	DOT	DHS	DOD	Hospitals	EMS Agencies	Private Industry	Professional Societies	Other
should be housed in the Department of Health and Human Services, and should have primary programmatic responsibility for the full continuum of EMS, emergency and trauma care for adults and children, including medical 9-1-1 and emergency medical dispatch, prehospital EMS (both ground and air), hospital-based emergency and trauma care, and medical-related disaster preparedness. Congress should establish a working group to make recommendations regarding the structure, funding, and responsibilities of the new agency, and develop and monitor the transition. The working group should have representation from federal and state agencies and professional disciplines involved in emergency and trauma care.										
3.7 Congress should appropriate $37.5 million each year for the next five years to the EMS-C Program.	X									
Chapter 4: Arming the Emergency Care Workforce with Knowledge and Skills										
4.1 Every pediatric and emergency care-related health professional credentialing and certification body should define pediatric emergency care competencies and require practitioners to receive the appropriate level of initial and continuing education necessary to achieve and maintain those competencies.									X	
4.2 The Department of Health and Human Services should collaborate with professional organizations to convene a panel of individuals with multidisciplinary expertise to develop, evaluate, and update pediatric emergency care clinical practice guidelines and standards of care.		X							X	
4.3 EMS agencies should appoint a pediatric emergency coordinator and hospitals should appoint two pediatric emergency coordinators—one a physician—to provide pediatric leadership for the organization.						X	X			
Chapter 5: Improving the Quality of Pediatric Emergency Care										
5.1 The Department of Health and Human Services should fund studies on the efficacy, safety, and health outcomes of medications used for infants, children, and adolescents in emergency care settings in order to		X								

	Congress	DHHS	DOT	DHS	DOD	Hospitals	EMS Agencies	Private Industry	Professional Societies	Other
improve patient safety.										
5.2 The Department of Health and Human Services and the National Highway Traffic Safety Administration should fund the development of medication dosage guidelines, formulations, labeling, and administration techniques for the emergency care setting to maximize effectiveness and safety for infants, children and adolescents. EMS agencies and hospitals should implement these guidelines, formulations, and techniques into practice.		X	X			X	X			
5.3 Hospitals and EMS systems should implement evidence-based approaches to reduce errors in emergency and trauma care for children.						X	X			
5.4 Federal agencies and private industry should fund research on pediatric-specific technologies and equipment used by emergency and trauma care personnel.		X	X	X				X		
5.5 EMS agencies and hospitals should integrate family-centered care into emergency care practice.						X	X			
Chapter 6: Improving Emergency Preparedness and Response for Children Involved in Disasters										
6.1 Federal agencies (the Department of Health and Human Services, the National Highway Traffic Safety Administration, and the Department of Homeland Security) in partnership with state and regional planning bodies and emergency care provider organizations should convene a panel with multidisciplinary expertise to develop strategies for addressing pediatric needs in the event of a disaster. This effort should encompass the following: 1) Development of strategies to minimize parent-child separation and improved methods for reuniting separated children with their families. 2) Development of strategies to improve the level of pediatric expertise on Disaster Medical Assistance Teams and other organized disaster response teams. 3) Development of disaster plans that address pediatric surge capacity for both injured and non-injured children.		X	X	X	X					

	Congress	DHHS	DOT	DHS	DOD	Hospitals	EMS Agencies	Private Industry	Professional Societies	Other
4) Development of and improved access to specific medical and mental health therapies, as well as social services, for children in the event of a disaster. 5) Development of policies that ensure that disaster drills include a pediatric mass casualty incident at least once every 2 years.										
Chapter 7: Building the Evidence Base for Pediatric Emergency Care										
7.1 The Secretary of DHSS should conduct a study to examine the gaps and opportunities in emergency care research, including pediatric emergency care, and recommend a strategy for the optimal organization and funding of the research effort. This study should include consideration of training of new investigators, development of multicenter research networks, involvement of emergency and trauma care researchers in the grant review and research advisory processes, and improved research coordination through a dedicated center or institute. Congress and federal agencies involved in emergency and trauma care research (including the Department of Transportation, Department of Health and Human Services, Department of Homeland Security, and Department of Defense) should implement the study's recommendations.		X	X	X	X					
7.2 Administrators of statewide and national trauma registries should include standard pediatric-specific data elements and provide the data to the NTDB. Additionally, the American College of Surgeons should establish a multidisciplinary pediatric specialty committee to continuously evaluate pediatric-specific data elements for the NTDB and identify areas for pediatric research.										X